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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,585	07/16/2001	Yehoshua Yeshurun	YESHURUN=3A	3898

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EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,585

Applicant(s)

YESHURUN ET AL.

Examiner

Ula C. Ruddock

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 30, 2005, has been entered.
2. The Examiner has carefully considered Applicant's amendment and accompanying remarks filed November 30, 2005. The rejections have been maintained.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

4. The declaration under 37 CFR 1.132 filed November 30, 2005, is insufficient to overcome the rejection of claims 14-33 based upon Blommer et al. and Fischer et al. as set forth in the last Office action because: the showing is not commensurate in scope with the claims. It appears as though Applicant's main argument is that Fischer does not teach a first ply of PMMA in an orientation different to that of the subsequent plies. However, Applicant's claims, as presently written, do not specify that only the first layer be in a different orientation when compared to the remaining layers.

Claim Rejections - 35 USC § 103

5. Claims 14-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blommer et al. (US 4,989,493) in view of Fischer et al. (US 4,594,290). Blommer et al. disclose a structure for attenuating explosive shock waves to prevent propagation of accidental explosions (abstract). The structure comprises a center sheet of steel surrounded by aluminum, poly methyl methacrylate (PMMA) acrylic plastic, and a rigid foam made from a 50/50 mixture of glass microballoons and a polyurethane resin (col 3, ln 34-40). It should be noted that the Examiner is equating Blommer's aluminum layer to Applicant's rear layer (as shown on page 5 of 6 of present specification) and Blommer's glass microballoons to the glass brittle covering in Applicant's invention. Blommer et al. disclose the claimed invention except for the teaching that the armor layer is slanted oriented relative to the expected trajectory of the oncoming projectile.

Fischer et al. disclose an impact resistant laminate that includes a first ply, which is disposed in the direction of an expected impact (col 1, ln 62-64). The first ply can comprise glass or polymethyl methacrylate (col 2, ln 19-20). It would have been obvious to one having ordinary skill in the art to have used Fischer's teaching of disposing the front ply in the direction of an expected impact on the structure of Blommer et al., motivated by the desire to create an explosion-attenuating device that has increased explosion attenuation.

With regard to claims 24 and 25, it would have been obvious to make the armor layer transparent or opaque, motivated by the desire to create a laminate having a desired aesthetic appearance.

With regard to claims 32 and 33, although the combination of Blommer et al. and Fischer et al. fail to specifically disclose "plates", it is the Examiner's position that it would have been obvious to one having ordinary skill in the art to have made the poly methyl methacrylate (PMMA)-acrylic plastic into a plate, motivated by the desire to create a device having increased explosion attenuation. Furthermore, the front surface of Blommer et al. and Fischer et al. is coextensive with the armor layer.

In addition, the combination of Blommer et al. and Fischer et al. would protect a body from oncoming regular firearm projectiles.

Rejection is maintained.

Response to Arguments

6. Applicant's arguments filed November 30, 2005, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that Fischer does not teach that their front layer is slantingly oriented and that their first ply of PMMA is in an orientation different to that of the subsequent plies. This argument is not persuasive because Fischer specifically states that the first ply is disposed in direction of an expected impact. Fischer never states that the additional layers are disposed in a direction too. Furthermore, the claims do not require that only the first layer be in a different orientation when compared to the remaining layers. Applicant also argues that the combination of Blommer and Fischer does not teach the presently claimed invention. This argument is not persuasive because the Examiner is using Fischer's teaching of disposing the first ply in the direction of an expected impact on the structure of Blommer. Therefore, only the first (i.e. front) layer of Blommer would be disposed in the direction of an expected impact. Applicant also

argues that the Blommer reference contains additional layers, which are not present in the claimed invention. This argument is not persuasive because the claims are written in open language, which do not preclude the use of additional layers. Therefore, the rejection is maintained.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR *UCR*

Ula Ruddock
Ula C. Ruddock
Primary Examiner
Tech Center 1700